Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of Claims:</u>

Claim 1 (Currently Amended) An appliance located states, which are changed in dependence on the existence of interaction with a person, accumulating method of accumulating data of a positional relation of positions where a plurality of appliances mutually connected through a network are located, comprising:

- (a) receiving state information indicative of operating state changes of the appliances which include a computing arrangement, through said network;
- (b) calculating an occurrence time difference from occurrence times when the state changes have been detected as having occurred by differing ones of the appliances, in accordance with occurrence time information indicative of occurrence times of the state changes included in the state information; and
- (c) acquiring distance between appliances which incur the state changes, based on the calculated occurrence time difference.

Claim 2 (Previously Presented) A method according to claim 1, wherein said acquiring calculates the positional relation in accordance with the occurrence time difference of the state changes occurred in two appliances and relationship weight information indicative of a distance between the two appliances.

Claim 3 (Original) A method according to claim 2, wherein said relationship weight information is a value calculated by a predetermined expression in accordance with two elements: number of times of occurring the state changes; and the occurrence time difference of the state changes occurred in the two appliances.

Claim 4 (Currently Amended) An apparatus constituted of a plurality of appliances mutually connected through a network and for accumulating data of a positional relation of positions where the appliances are located, comprising:

a reception means for receiving state information indicating operating state changes of the appliances which include a computing arrangement, through said network, where the state changes change in dependence on the existence efinteraction with a person;

calculation means calculating an occurrence time difference from occurrence times when the state changes have been detected as having occurred by differing ones of the appliances, in accordance with occurrence time information indicative of occurrence times of the state changes included in the state information; and

acquiring means acquiring a distance between appliances which incur the state changes, based on the calculated occurrence time difference.

Claim 5 (Previously Presented) An apparatus according to claim 4, wherein said acquiring means acquires the positional relation in accordance with the occurrence time difference of the state changes occurred in two appliances and relationship weight information indicative of a distance between the two appliances.

Claim 6 (Previously Presented) An apparatus according to claim 5, comprising storing means for storing the occurrence time difference of the state changes occurred in the two appliances and the relationship weight information indicative of the distance between the two appliances.

Claim 7 (Original) An apparatus according to claim 6, wherein the relationship weight information is a value calculated by a predetermined expression in accordance with two elements: number of times of occurring the state changes; and the occurrence time difference of the state changes occurred in the two appliances.

Claim 8 (Currently Amended) An-A household-appliance located states accumulating method of accumulating data of a positional relation of positions where a plurality of household-are located, comprising:

- (a) receiving state information indicative of operating state changes of the household appliances which include a computing arrangement, through a network, where the state change occurs responsive to interaction_existence- of a person in the home-household in proximity of the household appliance;
- (b) calculating occurrence time differences from occurrence times when the state changes have been detected as having occurred by differing ones of the household.org/news/ in accordance with occurrence time information indicative of occurrence times of the state changes included in the state information; and

(c) acquiring distance between <u>household</u> appliances which incur the state changes in the <u>household</u>, <u>home</u>, based on the calculated occurrence time differences.

Claim 9 (Currently Amended) A method according to claim 8, wherein said acquiring calculates the positional relation in accordance with the occurrence time difference of the state changes occurred in two household appliances and relationship weight information indicative of a distance between the two household appliances.

Claim 10 (Currently Amended) A method according to claim 9, wherein said relationship weight information is a value calculated by a predetermined expression in accordance with two elements: number of times of occurring the state changes; and the occurrence time difference of the state changes occurred in the two https://doi.org/10.1001/journal.org/

Claim 11 (Currently Amended) An apparatus A system constituted of a plurality of household appliances mutually connected through a network throughout a household, home, and for accumulating data of a positional relation of positions where the household appliances are located in the household, home, comprising:

a reception means for receiving state information indicating operating state changes of the household appliances which include a computing arrangement, through said network, where the state change occurs responsive to interaction

existence of a person in the <u>household home</u> in proximity of the <u>household</u> appliance;

calculation means calculating occurrence time differences from occurrence times when the state changes have been detected as having occurred by differing ones of the household appliances, in accordance with occurrence time information indicative of occurrence times of the state changes included in the state information; and

acquiring means acquiring a distance between household appliances which incur the state changes in the household, home, based on the calculated occurrence time difference.

Claim 12 (Currently Amended) An apparatus A system according to claim 11, wherein said acquiring means acquires the positional relation in accordance with the occurrence time difference of the state changes occurred in two household appliances and relationship weight information indicative of a distance between the two household appliances.

Claim 13 (Currently Amended) An apparatus A systemaccording to claim 12, comprising storing means for storing the occurrence time difference of the state changes occurred in the two household appliances and the relationship weight information indicative of the distance between the two household appliances.

Claim 14 (Currently Amended) An apparatus A system according to claim 13, wherein the relationship weight information is a value calculated by a predetermined

expression in accordance with two elements: number of times of occurring the state changes; and the occurrence time difference of the state changes occurred in the two household appliances.